CMO is a group of debt instruments that have claims on a portion of the cash flows from a pool of mortgages (or MBS such as a Pass Through).

Each piece of the CMO is called a "tranche" which is French for slice. An example of a CMO would be to take a $100,000,000 pool of mortgages and create Tranche A consisting of $20,000,000 of "short term" debt, Tranche B, $30,000,000 of medium term debt and Tranche C, $50,000,000 of long term (zero coupon like) debt. Say the note rate on the mortgages is 10%.

Tranche A may get 8%, and gets all of the prepayments until this debt is retired. Tranche B pays 9% per year and gets interest only payments, until Tranche A is fully paid off, at which time Tranche B gets all the prepayment income until Tranche B is paid off.
Tranche 2 gets accrued into it until Tranche A & B are paid off. At that point all the payments go to 2 until it is paid off. The last $3,000,000 goes to the "equity," so that this CMO is over collateralized. Also, some of the interest collected on the notes goes to servicing fees and guarantee fees. The "equity" position typically puts the CMO together.

The WAC (weighted average coupon) for this CMO is:

\[
WAC = \frac{1}{n} \sum x_i c_i
\]

\[x \quad \text{Proportion on Tranche} \]
\[C \quad \text{Coupon} \]
\[ \text{WAC} \quad 2(8\%) + 3(9\%) + 5(7.75\%) \]
\[ 16.01 + 27.10 + 48.75 = 91.86 \]

The difference between the WAC and the mortgage rate is for servicing guarantee, and return to equity investor.

To reduce the prepayment risk on CMO tranches even more, some CMOs are cut up with PACs and companions (Planned Amortization Class). Companions take up the prepayment uncertainty to the extent possible.

As the CMO market grew so did the number of tranches. It became common to sell large investors the cost of Cash Flow they wanted.
After all the desirable tranches were sold what was left was called a Kitchen Sink bond, because the originator had sold off everything except the Kitchen Sink.

Another way to clean up mortgages is to separate the principle payment from the interest payment.

PO: Principle only strip
IO: Interest only strip

An investor who buy PO's knows for sure what he or she will be repaid (i.e. the principal balance) they don't know when they will be repaid.

Someone who buy IO's know neither how much they will be paid back or when payments will occur (i.e. it depends on the payments). IO's are very risky and have a
Higher expected rate of return due to their risk.

High prepayments are bad for IO's and good for PO's.

Another type of CMO strip could be a variable interest rate strip. These are called "Floaters." It's easy to see how these are created with APRM's.

However, Floaters are also created from FRM's. To create Floaters from FRM's you would simultaneously create "inverse floaters."

So, if interest rates go up on the index instrument (such as Treasury's or LIBOR for example) then the payments a floater goes up, and the payment on inverse floater goes down. (and vice versa)